

WHAT IS CLAIMED IS:

1. An isolated polypeptide comprising:
- a) the amino acid sequence of SEQ ID NO: 8;
 - 5 b) the amino acid sequence of SEQ ID NO: 6, or
 - c) the amino acid sequence of SEQ ID NO: 2.
2. An antigenic polypeptide comprising:
- a) an immunogenic amino acid sequence exhibiting
 - 10 identity overall length of at least 12 amino acids to SEQ ID NO: 8;
 - b) an immunogenic amino acid sequence exhibiting identity over a length of at least 12 amino acids to SEQ ID NO: 6; or
 - 15 c) an immunogenic amino acid sequence exhibiting identity over a length of at least 12 amino acids to SEQ ID NO: 2.
3. An antigenic polypeptide of:
- 20 a) Claim 2a, further comprising:
 - i) a second length of identity of 12 amino acids;
 - ii) a detection or purification tag;
 - iii) a sequence of another chemokine receptor;
 - 25 or
 - iv) a carbohydrate;
 - b) Claim 2b, further comprising:
 - i) a second length of identity of 12 amino acids;
 - 30 ii) a detection or purification tag;
 - iii) a sequence of another chemokine receptor;
 - or
 - iv) a carbohydrate; or
 - c) Claim 2c, further comprising:
 - 35 i) a second length of identity of 12 amino acids;
 - ii) a detection or purification tag;
 - iii) a sequence of another chemokine; or

iv) a carbohydrate.

4. The polypeptide of Claim 1, which;
- a) has a molecular weight of at least 3 kD with
 - 5 natural glycosylation;
 - b) is a synthetic polypeptide;
 - c) is attached to a solid substrate;
 - d) is conjugated to another chemical moiety;
 - e) is a 5-fold or less substitution from natural
 - 10 sequence; or
 - f) is a deletion or insertion variant from a natural sequence.
5. A composition comprising:
- 15 a) a sterile polypeptide of Claim 1a,
 - b) a sterile polypeptide of Claim 1b; or
 - c) a sterile polypeptide of Claim 1c.
6. A kit comprising a polypeptide of Claim 1, and:
- 20 a) a compartment comprising said polypeptide; and/or
 - b) instructions for use or disposal of reagents in said kit.
7. A method of using said polypeptide of Claim 1
- 25 to:
- a) produce an antiserum, comprising immunizing an animal with said polypeptide, and isolating said antiserum; or
 - b) produce an antibody:antigen complex, comprising
 - 30 contacting said polypeptide with a specific antibody, thereby producing said complex.
8. A binding compound comprising an antigen binding portion from an antibody, which specifically binds to a
- 35 polypeptide of Claim 1, wherein:
- a) said binding compound is an Fv, Fab, or Fab2 fragment;

b) said binding compound is conjugated to another chemical moiety; or

c) said antibody:

- 5 i) is raised against a peptide sequence of a mature polypeptide of Figure 1 or Figures 3A-3C;
- ii) is raised against a peptide sequence of a mature rodent polypeptide of Figure 5;
- iii) is immunoselected;
- iv) is a polyclonal antibody;
- 10 v) binds to a denatured rodent CXC N4, rodent DNAXCCR10, or primate BLRx;
- vi) exhibits a Kd to antigen of at least 30 μ M;
- vii) is attached to a solid substrate, including a bead or plastic membrane;
- 15 viii) is in a sterile composition; or
- ix) is detectably labeled, including a radioactive or fluorescent label.

9. A kit comprising said binding compound of Claim 20 8, and:

- a) a compartment comprising said binding compound; and/or
- b) instructions for use or disposal of reagents in said kit.

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10. A composition comprising:

- a) a sterile binding compound of Claim 8; or
- b) said binding compound of Claim 8 and a carrier, wherein said carrier is:

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- i) an aqueous compound, including water, saline, and/or buffer; and/or
- ii) formulated for oral, rectal, nasal, topical, or parenteral administration.

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11. An isolated or recombinant nucleic acid encoding a polypeptide of Claim 1, wherein said nucleic acid:

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a) encodes an antigenic peptide sequence of Figure 1 or Figures 3A-3C;

b) encodes an antigenic rodent peptide sequence of Figure 5;

5 c) encodes a plurality of antigenic peptide sequences of Figure or Figures 3A-3C;

d) encodes a plurality of antigenic peptide sequences of Figures 2A-2B;

10 e) exhibits identity of at least 27 nucleotides of SEQ ID NO: 7, 5, or 1;

f) is an expression vector;

g) further comprises an origin of replication;

h) is from a natural source;

i) comprises a detectable label;

15 j) comprises synthetic nucleotide sequence;

k) is less than 6 kb, preferably less than 3 kb;

l) is from a mammal, including a rodent;

m) comprises a natural full length coding sequence;

20 n) is a hybridization probe for a gene encoding said protein; or

o) is a PCR primer, PCR product, or mutagenesis primer.

25 12. A cell or tissue comprising a recombinant nucleic acid of Claim 11.

13. The cell of Claim 12, wherein said cell is:

a) a prokaryotic cell;

b) a eukaryotic cell;

30 c) a bacterial cell;

d) a yeast cell;

e) an insect cell;

f) a mammalian cell;

g) a mouse cell;

35 h) a primate cell; or

i) a human cell.

14. A kit comprising said nucleic acid of Claim 11,
and:

- 5 a) a compartment comprising said nucleic acid;
b) a compartment further comprising a polypeptide of
SEQ ID NO: 8, 6, or 2; and/or
c) instructions for use or disposal of reagents in
said kit.

15. A nucleic acid which:

- 10 a) hybridizes under wash conditions of 45° C and
less than 700 mM salt to SEQ ID NO: 1;
b) hybridizes under wash conditions of 45° C and
less than 700 mM salt to SEQ ID NO: 5;
c) hybridizes under wash conditions of 45° C and
15 less than 700 mM salt to SEQ ID NO: 7;
d) exhibits identity over a stretch of 30
nucleotides to SEQ ID NO: 7;
e) exhibits identity over at least 30 nucleotides to
SEQ ID NO: 5; or
20 f) exhibits identity over at least 30 nucleotides to
SEQ ID NO 1.

16. The nucleic acid of Claim 15, wherein:

- 25 a) said wash conditions are at 55° C and/or 500 mM
salt; or
b) said identity is over at least 55 nucleotides.

17. The nucleic acid of Claim 16, wherein:

- 30 a) said wash conditions are at 65° C and/or 150 mM
salt; or
b) said identity is over at least 75 nucleotides.

18. A kit comprising said nucleic acid of Claim 15,
and:

- 35 a) a compartment comprising said nucleic acid;
b) a compartment further comprising a polypeptide of
SEQ ID NO: 8, 6, or 2; and/or

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c) instructions for use or disposal of reagents in said kit.

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19. A method of using said nucleic acid of Claim 15:

a) to produce a duplex nucleic acid, comprising contacting one strand of the nucleic acid to the complementary strand, thereby producing said duplex; or
b) to produce a polypeptide, comprising expressing said nucleic acid in a host cell, thereby producing said polypeptide.

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20. A method of screening for a compound which binds to a polypeptide of Claim 1 having SEQ ID NO: 8, comprising contacting said compound to said polypeptide, and detecting binding.

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21. An isolated polypeptide, comprising the amino acid sequence of SEQ ID NO:8, or a polypeptide having at least about 80% sequence homology thereto.

22. An isolated polynucleotide encoding the polypeptide of claim 21.

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23. The polynucleotide of claim 22, wherein the polynucleotide comprises the nucleotide sequence of SEQ ID NO:7, or a polynucleotide having at least about 80% sequence homology thereto.

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24. A recombinant vector comprising
(a) a polynucleotide according to claim 22; and
(b) control elements that are operably linked to said polynucleotide whereby a coding sequence within said polynucleotide can be transcribed and translated in a host cell, and at least one of said control elements is heterologous to said coding sequence.

25. A host cell transformed with the recombinant vector of claim 24.

26. A method of producing a recombinant polypeptide comprising:

(a) providing a population of host cells according to claim 25; and

(b) culturing said population of cells under conditions whereby a polypeptide encoded by the coding sequence present in said recombinant vector is expressed.

27. A method of expressing a recombinant polypeptide comprising:

(a) transforming a host cell with the recombinant vector of claim 22; and

(b) causing expression of a polypeptide encoded by the coding sequence present in said recombinant vector.

28. The method of claim 27, wherein the host cell is transformed *in vivo*.

29. The method of claim 28, wherein the host cell is in the region of a wound.

30. A method of treating a wound comprising:

(a) transforming a host cell *in vivo* with the polynucleotide of claim 22, wherein the host cell is in the region of a wound; and

(b) causing expression of a polypeptide encoded by the coding sequence present in said recombinant vector.

31. A method of treating a wound comprising modulating the *in vivo* expression of an endogenous polynucleotide in the region of the wound, wherein the polynucleotide encodes a polypeptide comprising the amino acid sequence of SEQ ID NO:8.

32. The method of claim 31, wherein expression is up-regulated.

5 33. An antibody reactive with the polypeptide of claim 21.

34. The antibody of claim 33, wherein the antibody is a polyclonal antibody.

10 35. The antibody of claim 33, wherein the antibody is a monoclonal antibody.

15 36. A method of treating a wound comprising administering the antibody of claim 33 to a subject in need thereof.

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